

2010 Eastern Great Basin Seasonal Assessment

Executive Summary

Antecedent Weather Conditions: Once again, winter conditions across Eastern Great Basin stretched across extremes. An active southern jet stream settled over the southwest US, bringing frequent wet storms to the southern third of EGB while leaving the northern two-thirds of the region dry. Frequent snowstorms contributed to much above normal snowpack over the southern Utah mountains while the central and northern Utah mountains struggled to hold 50-75 percent of normal snowpack by late April. Idaho and Wyoming fared much worse with many areas reporting below 50 percent of normal. The winter period -- December 2009 to February 2010 -- was the 9th driest for Idaho in 115 years and the 8th driest for Wyoming.

Fuels Status: Fuels have also presented a mixed bag in early spring. Low snowpack in Idaho and Wyoming will likely melt-off fairly early but the relatively cool pattern expected to continue through May should slow green-up -- or delay at higher elevations -- by two-to-four weeks. Early fall hard freezes killed large areas of brush in central Idaho. Large dead fuels with low fuel moisture content entering the winter may start this season well below normal. Increases in red-needle patches of beetle-infested forests, particularly in western Wyoming and eastern Idaho, will be a significant concern later in the summer. In Utah, a cool early spring has slowed grass emergence, resulting in stunted growth for some species, especially cheatgrass. Fall and winter emergence of natives in southeast Utah will bode well for management efforts. High snowpack in the southern mountains -- generally from Interstate 70 southward -- will delay green-up and curing well into the summer at mid and high elevations. Heavy snows in the West Deserts compacted most grasses that remained from last season. Continuity and fuel loadings in the grasslands do not appear to be a concern for this season.

Assessment: Large-scale circulation trends indicate a continued weakening of El Nino conditions. While ENSO patterns generally offer no clear-cut signal for how Great Basin weather patterns will evolve, this winter has displayed the "classic" El Nino pattern with wet, cool conditions to the south and dry, warm conditions in the north. Expect this pattern to continue through May before returning to more normal conditions going into June.

*Idaho and western Wyoming mountains will be impacted most with **above normal fire season starting by mid-late July**. Meanwhile, southwest Utah should remain in **below normal** through May and early June while the central and southern mountains remain in **below normal fire** for the season. Elsewhere, conditions will be normal through the season.*

Implications: Delays in green-up and curing cycles will have implications for fire management strategies, especially for long duration fires that begin mid-summer and extend into late summer when weather conditions normally become more favorable for large fires.

Despite a normal outlook, fire management must consider:

- Rapid snowmelt in southern Utah could lead to early drying of large dead fuels. Drier than normal summer conditions could increase fire potential for southern forests.
- Severe bug kill in northern forests could serve as catalyst for increased fire potential if an early loss of snowpack is followed by unusually hot and dry conditions.

